PROCEEDINGS OF A MEETING HELD IN COMMEMORATION OF HARRISON ALLEN, M. D., AND GEORGE HENRY HORN, M. D.

In compliance with a resolution adopted by the Academy of Natural Sciences of Philadelphia a meeting was held December 31, 1897, in conjunction with kindred societies, to commemorate the services rendered to science by Dr. Harrison Allen and Dr. George H. Horn. The Chair having been taken by Dr. Henry Skinner, Chairman of the Committee of Arrangements, the following papers were read:—

BIOGRAPHICAL NOTICES OF HARRISON ALLEN AND GEORGE HENRY HORN.

BY EDWARD J. NOLAN, M. D.

The period of the Academy's history with which Doctors Allen and Horn are first identified, the years of the early '60's, was bright with both accomplishment and promise. Made notable by the work of the illustrious veterans who were still active and by that which might be hoped for from those who were just beginning their careers, it was probably the most brilliant epoch in the history of the society. But few of the great collections which have since come into prominence were in existence. The Smithsonian Institution was then rather a distributing agency than a store-house of scientific material, and museums everywhere were benefited by its activity. The United States Government had not become, through the Agricultural Department, the National Museum, and the Geological Surveys, a formidable rival in the publication of scientific papers, and the work of Gill, Meek, Hayden, Coues, Stimpson, Kennicott, Yarrow and others was made known to the scientific world most promptly and accurately through the Proceedings of this Academy.

In the old building at the corner of Broad and Sansom Streets, Leidy, easily first among equals, pursued his paleontological studies in a little, dark and dusty room on the first floor of the museum, his brilliant microscopical investigations being carried on more comfortably at home. The results were reported in either case to the meetings of the Academy, and could generally be depended on to render them interesting, even though nothing else were forthcoming.

Cassin had the western room of the library filled with trays of mounted birds and scores of ornithological volumes which no one about the place dared to touch, for Cassin was very much of an autocrat and was impatient of rules. Books and specimens, however, were made good use of, especially on Sundays, for the exigencies of bread-winning left him but little time during the week for his favorite study.

S. B. Buckley occupied the herbarium, a long, narrow, dark room in the southeast corner of the second museum floor. He had presented and published some interesting observations on ant-life, and was then working up his collection of Texan plants, the publication of his results calling forth savage criticism from Asa Gray, which created quite a stir at the time and gave poor Elias Durand, the Director of the Herbarium, more than one bad quarter of an hour.

The President, Isaac Lea, was reading by title his contributions to the genus Unio and other conchological papers, synopses of which were published in the *Proceedings*, to be afterward expanded into parts of the *Journal*, sumptuously illustrated at the expense of the author by some of the finest lithographs ever made in America.

The place left vacant in 1850 by Samuel George Morton had been filled by James Aitken Meigs, who, after serving a brief term as Librarian, was devoting all the time he could spare from a rapidly growing practice to the study of anthropology. Thirty years later the Academy came into possession of the library he was then collecting and a portion of the fortune resulting from his successful professional work.

The sound of the fierce battle between Lea and Conrad had died away to a distant reverberation, and the latter, as efficiently as his dyspepsia would allow, was describing fossil mollusca and making autograph drawings on stone of his new species. His activity was greatly stimulated by the facilities for publication supplied by the newly started American Journal of Conchology, and by the interest in his work displayed by the editor, George W. Tryon, Jr.

Thomas B. Wilson had just presented the superb collections of birds which for many years were, and perhaps still are, the crowning glory of the Academy. They had been deposited from time to time since 1845, and Wilson had even made an addition to the Academy's building for their arrangement, but they only became the absolute property of the society in March, 1860.

We find the Curators at this time complaining that in spite of Wilson's addition the building was rapidly becoming too small for the collections, a disadvantage which, in November, 1865, resulted in the appointment of a committee "to devise," in the language of the resolution, "methods for advancing the prosperity and efficiency of the Academy by the erection of a building of a size suitable to contain the collections."

In the intervals of cruises, Dr. Ruschenberger was introducing improvements in the administration of affairs, and to his energy and devotion is due the ultimate success of the Committee on Building then appointed. Some administrative reforms were indeed required, for although the Academy had been brought to the distinguished position it then held by the voluntary labors of those interested in the advancement of knowledge, the absence of responsibility was productive of serious disadvantages. Up to this time no one connected with the institution, except the janitor, had received continuous compensation for service rendered, although appropriations were made from time to time for special work as occasion required. The services of an Assistant Librarian were secured in January, 1862, at the munificent compensation of two dollars a week, and an assistant to the Curators was appointed some time after. Dr. Leidy, then, as during the rest of his life, Chairman of the Curators, had been heard to declare that if the Academy were in possession of everything it had ever owned, a building twice the size of the one then occupied would be required to house the collections. The losses were due partly to the destructive action of time, partly to bad museum methods, and partly, it is to be feared, to a liberal interpretation of the law of meum and tuum. The enthusiastic young naturalists of the period were allowed to rearrange and disarrange the collections as they pleased, each according to his own ideas of classification. Infested birds were carried to the cellar by the hundred and baked in a hot oven until they became as brittle as punk. The insects, especially, were entirely neglected because of the activity of the recently founded American Entomological Society and the serious disagreement then existing between Thomas B. Wilson and John L. LeConte. A valuable collection of insects was being rapidly reduced to dust, and an enthusiastic young entomologist of the time proposed transferring the few remaining good butterflies bodily to his own collection, so that they might be preserved from destruction. It was not the Curators or the members of the Entomological Committee, but the Assistant Librarian who prevented the carrying out of his virtuous intention. As for the

Cassin had the western room of the library filled with trays of mounted birds and scores of ornithological volumes which no one about the place dared to touch, for Cassin was very much of an autocrat and was impatient of rules. Books and specimens, however, were made good use of, especially on Sundays, for the exigencies of bread-winning left him but little time during the week for his favorite study.

S. B. Buckley occupied the herbarium, a long, narrow, dark room in the southeast corner of the second museum floor. He had presented and published some interesting observations on ant-life, and was then working up his collection of Texan plants, the publication of his results calling forth savage criticism from Asa Gray, which created quite a stir at the time and gave poor Elias Durand, the Director of the Herbarium, more than one bad quarter of an hour.

The President, Isaac Lea, was reading by title his contributions to the genus Unio and other conchological papers, synopses of which were published in the *Proceedings*, to be afterward expanded into parts of the *Journal*, sumptuously illustrated at the expense of the author by some of the finest lithographs ever made in America.

The place left vacant in 1850 by Samuel George Morton had been filled by James Aitken Meigs, who, after serving a brief term as Librarian, was devoting all the time he could spare from a rapidly growing practice to the study of anthropology. Thirty years later the Academy came into possession of the library he was then collecting and a portion of the fortune resulting from his successful professional work.

The sound of the fierce battle between Lea and Conrad had died away to a distant reverberation, and the latter, as efficiently as his dyspepsia would allow, was describing fossil mollusca and making autograph drawings on stone of his new species. His activity was greatly stimulated by the facilities for publication supplied by the newly started American Journal of Conchology, and by the interest in his work displayed by the editor, George W. Tryon, Jr.

Thomas B. Wilson had just presented the superb collections of birds which for many years were, and perhaps still are, the crowning glory of the Academy. They had been deposited from time to time since 1845, and Wilson had even made an addition to the Academy's building for their arrangement, but they only became the absolute property of the society in March, 1860.

We find the Curators at this time complaining that in spite of Wilson's addition the building was rapidly becoming too small for the

collections, a disadvantage which, in November, 1865, resulted in the appointment of a committee "to devise," in the language of the resolution, "methods for advancing the prosperity and efficiency of the Academy by the erection of a building of a size suitable to contain the collections."

In the intervals of cruises, Dr. Ruschenberger was introducing improvements in the administration of affairs, and to his energy and devotion is due the ultimate success of the Committee on Building then appointed. Some administrative reforms were indeed required, for although the Academy had been brought to the distinguished position it then held by the voluntary labors of those interested in the advancement of knowledge, the absence of responsibility was productive of serious disadvantages. Up to this time no one connected with the institution, except the janitor, had received continuous compensation for service rendered, although appropriations were made from time to time for special work as occasion required. The services of an Assistant Librarian were secured in January, 1862, at the munificent compensation of two dollars a week, and an assistant to the Curators was appointed some time after. Dr. Leidy, then, as during the rest of his life, Chairman of the Curators, had been heard to declare that if the Academy were in possession of everything it had ever owned, a building twice the size of the one then occupied would be required to house the collections. The losses were due partly to the destructive action of time, partly to bad museum methods, and partly, it is to be feared, to a liberal interpretation of the law of meum and tuum. The enthusiastic young naturalists of the period were allowed to rearrange and disarrange the collections as they pleased, each according to his own ideas of classification. Infested birds were carried to the cellar by the hundred and baked in a hot oven until they became as brittle as punk. The insects, especially, were entirely neglected because of the activity of the recently founded American Entomological Society and the serious disagreement then existing between Thomas B. Wilson and John L. LeConte. A valuable collection of insects was being rapidly reduced to dust, and an enthusiastic young entomologist of the time proposed transferring the few remaining good butterflies bodily to his own collection, so that they might be preserved from destruction. It was not the Curators or the members of the Entomological Committee, but the Assistant Librarian who prevented the carrying out of his virtuous intention. As for the library: a distinguished ornithologist has recently been heard to lament that in Cassin's time he could take away any book he wanted. The by-law governing the case then, as now, forbade the removal of books from the building, and, although this gentleman doubtless returned all he borrowed, the same, it is to be feared, could not be said of others who violated the law. Although then without a cent of endowment, this department of the Academy was kept well up with the times by exchange of publications and the munificence of Dr. Thomas B. Wilson.

The meetings were interesting and well attended, and the annual volume of the *Proceedings*, thanks to the absence of competition, had attained dimensions not since reached.

The most hopeful feature, however, of that epoch, was the galaxy of young men who were then appearing on the scene, some of whom turned out to be brilliantly successful, while others were far from reaching the goal of their ambition.

Cope had been elected a member in July, 1861, although prior to that he had been an active worker in the Academy. The Curators had reported in 1859: "The care of the herpetological cabinet, which for some time had lost the valuable services of Dr. Hallowell in consequence of illness, has now been undertaken by E. D. Cope, a young man who gives promise of much future usefulness both to the Academy and to Natural History." He contributed three papers to the *Proceedings* that year, and seven in 1860. All his time was at this period devoted to herpetology, his work being done in a small room on the first gallery floor. It was filled to overflowing with books, bottles, the remains of luncheons, old clothes and other impedimenta. His personal peculiarities were quite as pronounced then as a later period of his career, and he already gave promise of becoming what he was afterward justly said to be: the greatest naturalist born on American soil.

Directly beneath Cope's quarters, in the northeast corner of the museum floor, was the mammalogical room where John Hamilton Slack, a man of great versatility, laid ambitious plans for a monograph of the quadrumana. As first proposed, it was to take the form of a dignified quarto or even folio, to be richly illustrated at the expense of the author, but it eventually appeared as a modest paper of sixteen pages in the *Proceedings* for 1862. His ability as a musician and amateur conjuror interfered with his scientific work. Versatility has its disadvantages.

Tryon's first paper had been contributed in 1861. He was an indefatigable worker, and gave up his interest in a lucrative business to devote himself to science. He was most generous in his appreciation and encouragement of others. He started the American Journal of Conchology in 1865, and, in 1879, the Manual of Conchology, which is still issued by the Section founded by him. His business training and strict attention to details of management enabled him, strange to say, to make both of these unpromising enterprises yield him a revenue, all of which, with much more, was, on his death, left to his favorite department of the Academy. In quite a special sense, therefore, his work continues.

Gabb had been appointed a Jessup Fund student, and was engaged in those studies which enabled him to render good service on the Geological Survey of California, and to act as Director of the Survey of San Domingo. The income of the Jessup Fund had become available for the assistance of young naturalists in 1860, the first recipient of benefits being Charles Conrad Abbott, then engaged in the study of ichthyology, but since celebrated for his graceful contributions to the literature of popular natural history. During the first years of the existence of the Fund, nearly all the young workers in the Academy, including the subjects of this notice, and several of more mature years, were assisted from the income thereof. The Jessup Fund was then, and continues to be, productive of most desirable results.

Prominent in this group of aspiring young naturalists were Harrison Allen and George Henry Horn. It is especially fitting, and, indeed, almost unavoidable, that the services rendered by them to science should be commemorated jointly, as their lives were laid in parallel lines to a singular degree. Horn was born in 1840, Allen one year later; they were pupils of the Central High School at the same time, classmates and members of the same graduating class in the Medical Department of the University of Pennsylvania; their work in the Academy began about the same time, they were both Jessup Fund students, they served contemporaneously in the medical corps of the army during the closing years of the war; they were to a limited degree, collaborators in their scientific work; they each held the office of Corresponding Secretary in the Academy, they were members of the Academy's Standing Committees at the same time; they sat together at the Council Board until their work was done, and they died within ten days of each other—the elder after a him several times and stayed some days each visit. He used to bring or send an ambulance for me, and I remember the pleasure I had in the country, going there. I was much struck with the administrative ability he displayed. Remember that he was a very young man for such a place as he held, having a considerable staff of assistants, all of whom, I think, were older than himself. He was a rigid disciplinarian, and I heard he was complained of for keeping aloof from his staff, but I am inclined to think he was wise in doing so. He did not join with the hospital surgeons' mess, but had his meals served in a pleasant room, taking them alone or with members of his staff or others whom he specially invited for each occasion. His companionship was certainly very congenial to me, and I presume, from the frequency and urgency of his invitations, mine was to him. Our discussions were by no means confined to medicine or even zoology. They embraced a wide range of subjects, and I was often surprised to learn how multifarious were his sympathies and how wide his range of reading."

On his return to Philadelphia he made an earnest but dignified canvass for the Professorship of Zoology and Comparative Anatomy in the Auxiliary Faculty of Medicine of the University, just then endowed by Dr. George B. Wood. He was endorsed by strong letters from American and foreign naturalists who recognized the merit of his published works. He had no social backing; the influence he brought to bear on the Trustees of the University was legitimately based on his standing as a zoologist, and was in marked contrast to the campaign of at least one of his competitors.

Dr. Allen was the successful candidate. He held the position to which he was then elected until 1879. His lectures on medical zoology were so well received that, at the request of the class, he prepared his Outlines of Comparative Anatomy and Medical Zoology, the publication of which was, however, owing to professional engagements, delayed until 1869. The volume is by no means the least important of the author's works, and it is of special interest in the present connection inasmuch as the chapters on Hemiptera and and Cantharis were contributed by Dr. Horn.

In the latter part of 1876, Dr. Francis Gurney Smith, the Professor of the Institutes of Medicine in the University, was unable to continue his course of lectures which was completed by Dr. Henry C. Chapman. The course of 1877-78 was delivered by Dr. James Tyson. On his resignation at the end of that term Dr. Allen was

appointed to fill the vacancy. He held the professorship until 1885, when he resigned because of increased professional work. He was emeritus professor of the Institutes until 1891, when, on the death of Dr. Leidy, he resumed his old position in the Auxiliary Faculty which he held until last year. He also served for one year as Director of the Wistar Museum.

On establishing himself in Philadelphia at the close of the war, he at first engaged in the practice of general surgery. His love of minute detail caused him to concentrate his attention on the affections of the upper air passages, his inclination to do so being, perhaps, obscurely the result of his early dental studies. So successful was he in his specialty that he soon became a recognized authority in laryngology and rhynology, the latter science having, it may almost be said, originated in his diagnosis of disturbances of the nasal mucous membranes and his careful descriptions of departures from the normal anatomy of the facial region.

His professional and zoological work were equally distinguished by untiring care in the elaboration of minute details, a characteristic as evident in his first descriptions of bats as in his most recent craniological studies. Had Dr. Allen been an artist instead of a physician he would have been a Meissonier rather than a Makart.

The scope of Dr. Allen's interest in professional and scientific work is clearly indicated by the positions he held in the Academy and elsewhere, a brief statement of which is all that can be here given:—

He was assistant to Wills' Eye Hospital from 1868 to 1870; Surgeon to St. Joseph's Hospital from 1870 to 1878 and visiting surgeon to the Philadelphia Hospital from 1874 to 1878.

He held the position of Professor of Anatomy in the Philadelphia Dental College from 1866 to 1878. He was Vice-President of the Pathological Society of Philadelphia in 1877; President of the American Laryngological Association in 1886, of the American Association of Anatomists from 1891 to 1893, and of the Anthropometric Society at the time of his death. He served as judge in the Section of Anthropology at the Columbian Exposition in 1893, and was a member of the American Philosophical Society, the Boston Society of Natural History, the Biological Society of Washington, the Philadelphia County Medical Society, the Neurological Society of Philadelphia, the Historical Society of Texas, and Corresponding Member of the Society of Natural Sciences of Chili. He served as President of the Contemporary Club in 1894–1895.

It was in connection with the Academy, however, that nearly all of his extra professional work was accomplished. He was but little interested in administrative affairs, and was reluctant to accept official positions the duties of which might interfere with his favorite studies. He served as Corresponding Secretary in 1867, and was a member of the Council at intervals from 1876 until his death. He also served on the Library Committee. He was instrumental in founding the Anthropological Section and was its Director until his death. He contributed his last scientific communication to one of its meetings. The character and extent of the work accomplished in the Academy and elsewhere will be considered by competent judges of its value.

Dr. Allen was married to Miss Julia Colton, Dec. 29, 1869. His widow, a son and a daughter survive him. He found rest and relaxation from his professional and scientific work in literature, music, and the sympathy and affection of a devoted domestic circle. His summers were spent at his home in Sciasconset on Nantucket Island, whence he would return in the fall invigorated by the outdoor life of a lover of nature.

In his intercourse with his professional brethern and his scientific associates, Dr. Allen was always helpful and appreciative. A certain reserve and dignity of bearing gave assurance of intellectual force which was fully realized on a close acquaintance with the man and his work. He was precise and careful in his statements, charitable in his judgment, and generous in his dealings with the poor, the weak and the sick. His religious convictions were earnest and definite. He was brought up as a Hicksite Friend, but later in life he accepted the doctrines of Trinitarian Christianity, and, in the spring of the present year, he was baptized according to the rites of the Protestant Episcopal Church.

In the summer of 1895 he had an attack of indisposition which he seems to have regarded as a premonition of the affection which, two years later, proved fatal. Last April he underwent an operation for appendicitis from which he survived only through the prompt action of his physicians in the administration of stimulants and the employment of artificial respiration. His summer at Sciasconset, seemed, as usual, to have strengthened his vitality. He resumed his professional work on his return to Philadelphia, and made frequent and sometimes prolonged visits to the Academy where he completed some anthropological investigations, the results of which

will be published by the Wagner Free Institute of Science and the United States Government.

He presided at the meeting held November 12th in commemoration of his life-long friend the late Edward D. Cope, in the rooms of the American Philosophical Society. Some of those who were present on that occasion were painfully aware that Dr. Allen was far from well. Two days later, on the afternoon of Sunday, November 14th, he was seized with an attack of angina pectoris which resulted in death.

In 1860 he had written to his mother: "it is my ambition to be known as a good physician and a good man." Those who knew Dr. Allen best as a physician and a man, know with what completeness of fulfilment he had lived his life.

George Henry Horn was born in Philadelphia, April 8, 1840. His preliminary education was received in the Jefferson Boys' Grammar School, from which he entered the Central High School, July, 1853. He took the full course and graduated with the degree of Bachelor of Arts, February 11, 1858. The degree of Master of Arts was conferred on him by his Alma Mater, July, 1863. At the time of his graduation he lived at the southwest corner of 4th and Poplar Streets, where his father was the proprietor of a drug store.

Almost immediately after leaving the High School he matriculated in the Medical Department of the University of Pennsylvania. He took his degree in medicine in 1861, his thesis being entitled "Sprains."

While yet a student of medicine he contributed his first papers to the *Proceedings* of the Academy. He did not immediately devote himself to the specialty in which he later became so distinguished, his first three contributions to science being descriptions of new species of recent and fossil corals and comments on Milne-Edwards' classification of those organisms.

There is every reason to believe that his incentive to the study of natural history was received, as in Dr. Allen's case, from the professors of the High School. In addition to McMurtie's lectures, Dr. B. Howard Rand, at that time Recording Secretary of the Academy, was liberal in the distribution of tickets of admission to the Museum, and many of his pupils found profitable occupation for their Friday afternoons in visiting the collections.

Horn was early thrown into association with Dr. John L. Le-Conte, whose prominence as a coleopterologist was undisputed. The mutual regard then established led to community of study and was only interrupted by death.

Dr. Horn's fourth paper, also published in 1860, was on new species of North American coleoptera in the cabinet of the American Entomological Society. His later contributions to science, the extent and value of which will be treated of by one eminently qualified to do so, were, with one or two exceptions, devoted to this specialty, as an authority on which Dr. Horn certainly had on rival in America at the time of his death.

Having passed the required examination, Dr. Horn received a commission as Assistant Surgeon in the United States Army, March 1, 1863. He was attached to the 2d California Cavalry, Department of the Paeifie, until July 14th of the following year, when he was commissioned as surgeon of the 1st California Infantry Volunteers, remaining in that position until the term of service of the regiment expired, Dec. 3, 1864. He was again mustered into service May 22, 1865, as assistant surgeon of his old regiment, the 2d California Cavalry, and commissioned as surgeon of the 2d California Infantry, September 23, 1865. His service terminated with that of the staff of his regiment, April 16, 1866.

During his military service in the west he improved the opportunity to make extensive additions to his collection of colcoptera, and was intimately associated with the California Academy of Sciences.

On his return to Philadelphia he devoted himself to the general practice of medicine, his field being in the northwestern section of the city, with which he had been identified nearly all his life, and where he was held in the highest esteem by those to whom he ministered as a physician. He was especially skilful as an obstetrician, and hundreds of families felt that they had suffered irreparable loss when he retired from the duties of active practice a few years before his death.

Dr. Horn's devotion to seience was singularly undivided. Although every obligation of his profession was regarded by him as binding, he practised medicine merely as a means to an end. He found at once his relaxation and intellectual profit when, after an exhausting day of attendance on the sick, he was at leisure to pore over his cherished insect-cases until far into the night. Not having

married, he was not distracted by domestic ties from his favorite occupation, and for social engagements he cared but little. Art and literature were to him outside issues, very well in their way, but to be left to the cultivation of others. As a contributor to knowledge, his function was well-defined, and recognition of his success as an entomologist was valued by him the more because of the singleness of his interest.

It is gratifying to know that such recognition was conveyed to him in abundant measure by those who knew of the enduringly accurate character of his work. He was one of the twelve honorary members of the Entomological Society of Belgium, one of the sixteen honorary members of the Entomological Union of Stettin, and one of the eleven honorary members of the Entomological Society of France. He was an active member of the Russian Entomological Society, Correspondent of the Boston Society of Natural History, the Biological Society of Washington, the Kansas Academy of Sciences, and the Zoologico-Botanical Society of Vienna. He was also a member of the College of Physicians of Philadelphia, the Entomological Societies of New York, Washington and Newark, and honorary member of the Feldman Collecting Social. He was Librarian and one of the Secretaries of the American Philosophical Society at the time of his death.

On the death of his valued friend, Dr. John L. LeConte, he was elected President of the American Entomological Society, a position which he held continuously until his death, combining with it the Directorship of the Entomological Section of the Academy.

He received the title of Professor of Entomology from the University of Pennsylvania. The position, it is believed, was entirely honorary, no active duties being attached to it.

As might be supposed from the strictly defined limits of his field of scientific investigation, his work was more in connection with the American Entomological Society than with the Academy, although his interest in the latter was unflagging. He was elected a member July 31, 1866, on his return from the west. He served as Corresponding Secretary from 1876 to 1890. He was a member of the Council from February 23, 1875 to December 26, 1876. He was again elected in December, 1891, and held the position at the time of his death. He also served on the Finance Committee for 1893, and on the Publication Committee from 1875 to 1890, and from 1893 to the end. The duties of these several positions were performed by him with fidelity and discretion.

His relinquishment of active professional work was probably due to a consciousness of failing vigor, but the gravity of his condition was not manifest until December 26, 1896, when he was stricken with unconsciousness while engaged in playing a game of cards with some friends at the Columbia Club. Although he partially rallied from the attack and was able to attend the Nansen meeting in the rooms of the American Philosophical Society, his work was done and the interval was one of patient waiting for the end. Among his few relaxations during his later years, had been those enjoyed as a member of a fishing club which occupied a comfortable house at Beesley's Point, N. J. He took an active part in the management of the establishment, and the last months of his life were spent there, until a renewed attack of cerebral hemorrhage terminated in death, November 24th of the present year.

The loss sustained by the Academy in the death of Drs. Horn and Allen is the most recent of a disastrous series beginning in 1891 with that of Dr. Joseph Leidy, and immediately preceded early in the present year by that of the brilliant naturalist, Edward D. Cope. The effect of such subtraction from the membership of the society must be acutely felt, but the work of these distinguished men lives after them, and we may be consoled by the hope that the influences which formed them, and which in no small measure emanated from this Academy, may continue to produce worthy successors who will be sustained and encouraged by the unselfish devotion to the cause of intellectual advancement of those who have gone before.

DR. ALLEN'S ZOOLOGICAL WORK.

BY SAMUEL N. RHOADS.

So far as we have any record, Dr. Harrison Allen's first and last papers on zoological subjects, as well as his last verbal communication before a scientific body, were originally presented in this Academy. Of seventy contributions to science, accessible to the author, fully one-half were first issued in the publications of this society.

In systematic zoological work Dr. Allen's publications number about thirty; in comparative anatomy, forty; those exclusively relating to Man number seven, while eight relate largely to the special subject of animal locomotion. With the exception of about ten of the seventy titles attributed to him, his papers are in the